



## EFFECT OF COST LEADERSHIP STRATEGY ON ORGANIZATIONAL PERFORMANCE OF LOGISTICS FIRMS AT JOMO KENYATTA INTERNATIONAL AIRPORT, KENYA

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### Abstract:

This paper looks at how logistics firms operating at Kenya's premier airport; Jomo Kenyatta International Airport, Nairobi use cost leadership strategy to drive their performance. The study therefore looked at the degree to which application of cost leadership strategies resulted to performance improvement. This research was guided by Porters five forces theory. The study was informed by explanatory research design. It targeted a population of 151 respondents and a sample size of 110 top and middle level management forming the study population. The study data came from 10 logistics firms with active websites operating at JKIA Nairobi. The respondents identified were selected using simple random sampling technique. A questionnaire based on the variables of the study was used to collect data from respondents. Analysis of data involved use of descriptive and inferential statistics. It was found out that cost leadership had a significant positive effect ( $p < 0.05$ ) on logistics firms performance. It was found out that as a result of utilising this approach, there was increased sales volume and profits. Further, there was reduction of costs associated with operations that resulted to increased profit margin. The paper recommends that there is need for all logistics firms to consider integrating cost leadership aspects in all their departments and sections of the organisation.

**Keywords:** cost leadership strategy, performance, logistics

### 1. Introduction

Competitive strategies are a broad formula on how business is going to compete in an increasingly dynamic environment. The intensity of competition in the logistics firms is underlined in the economic structure and goes well beyond the behaviour of current

competitors. The state of competition depends on the bargaining power of buyers and sellers, the threat of new entrants, potential substitute products and rivalry among existing competitors that determine the inherent profit potential of an industry (Pimtong, Hanqin & Hailin, 2012). Competitive strategy involves cost leadership, differentiation and focus strategies. However, this paper will address the cost leadership aspect of competitive approach to organisation performance. Cost leadership strategies involves cutting down costs throughout the value chain to try and achieve the minimum cost structure possible where the products are made of high value, but with limited standard features with the intention of gaining competitive advantage thus increasing market share (Sumer & Bayraktar, 2012).

In an international economy, competitive and dynamic environment, logistics firms are an important strategic factor for increasing competitiveness (Roman, Parlina & Veronika, 2013; Spillin, McGinnis & Liu, 2013). The performance of logistics firms are related to delivery services, logistics cost and tied up capital. Customers increasingly expect shorter delivery times and more accurate services and logistics management is perhaps most easily conceptualized in manufacturing, since there was a physical flow of goods (Spillin *et al.*, 2013). Logistics firms play a key role in the economy, and the market volumes of logistics have already reached a substantial level in many economies as a result. Companies that are successful worldwide have long recognized the critical role logistics firms play in creating benefit (Spillin *et al.*, 2013). The demand for products could only be satisfied through the proper and cost-effective delivery of goods and services (Ittmenn & King, 2010). According to Enida, Vasilika and Amali (2015), long-term strategy should derive firms' attempt to seek and sustain competitive advantage, based on cost leadership strategies. Cost leadership strategies depend on some unique capabilities of the firm to achieve and sustain their low cost position within the industry of operation. This paper therefore looks at how cost leadership has influenced performance of logistics firms operating at JKIA, Nairobi County.

## **2. Problem Statement**

Accordingly, Shippers Council of Eastern Africa (SCEA) 2013 report showed that most international traders' respondents ranked the quality of logistics services in Kenya as average. This prompted the current researcher to investigate the cost leadership strategies that the logistics firms in JKIA have adopted to promote their performance (World Bank Logistics index, 2017). This index showed how low Kenya was in terms of logistics performance and a need for further research to come up with the ways on how to improve the situation to be above other East African countries. This could be attributed to delayed arrivals at ports, leading to higher transport costs, complex regulations governing international trade (documents processing and compliance checks), subsequent delivery delays and increased warehousing expenses, poor packaging as well as manual operations instead of technological approach. It was due

to the above-mentioned reason that the study investigates the effect of cost leadership strategy on performance of logistics firms operating at JKIA, Nairobi, Kenya.

### 3. Theoretical Framework

This theory identifies five forces of competition as fierce rivalry, threat to entry, threat to substitutes, power of suppliers and power of buyers. The theory upholds that understanding the forces that shape a sectors competition is the basis for developing a strategy. Generic strategies can be effectively correlated to organizational performance by using key strategic practices. Porter posits that if the forces are extreme, no organization earns striking returns on investment and if the forces are benign, most of the companies are profitable. The composition of the five forces varies by industry and that an organization needs a separate strategy for every distinct industry such as the logistics firms. Porter's (2002) generic strategies comprise of low cost, differentiation, focus and combination strategies. These are commonly conventional as a strategic typology for all organizations. Porter and Millar (1985) asserts that an organization is mostly concerned with the amount of competition within its industry. He asserts that low cost and differentiation are distinct ends of a continuum and that may for no reason be related to one another has sparked a great deal of theoretical debate and empirical research. This debate may have been partly encouraged by the absence of conceptual building blocks supporting his value system theory. Scholars have since postulated theories that argue against Porter's point of view, proposing that low cost and differentiation may really be independent dimensions that should be strongly pursued concurrently (Kitoto, 2008).

Karanja (2015) suggests that the generic strategy framework could be enhanced by viewing cost, differentiation and focus as three dimensions of strategic positioning other than as three discrete strategies. The idea that pursuing multiple sources of competitive advantage is both feasible and desirable has also been supported by other researchers (White, 2008). Thus, the research in strategic management following from Porter does not provide explicit support for Porter's original formulation. Porter's theory is an influential tool for methodically diagnosing the main competitive pressures in a market and assessing how strong and significant. Kitoto (2016) observed that a correct analysis of the five forces will assist a firm choose one of the generic strategies that will successfully enable the organization to compete profitably in an industry.

In this study, Porter's Five Forces theory can be used to explain competitiveness and organizational performance. The Porter's Five Force theory was meant to relate the ability of a firm to overcome these challenges in its turbulent environment as well as increase performance. Given that the logistics firms at JKIA face these competitive forces, the use of competitive strategies adopted by the study are very precise to the theories outlined problems. This theory also relates to the forces of competitiveness towards profitability meaning the study is on point about solving the problem using the solutions of competitiveness. Managers in logistics firms therefore can only develop

and choose winning strategies by first identifying the competitive pressures that exists, measuring the virtual strength of each and gaining a profound understanding of the sector's completely competitive structure. Porter's value chain approach allows for the determination of the attractiveness of the industry. With the knowledge about intensity and power of competitive forces, logistics firms can then develop options to influence them in a way that improves their own competitive position. To survive, logistics firms must adapt their strategies to suit the dynamic market place. The winning strategy selected can change the impact of competitive forces on the firm. The aim is to decrease the power of competitive forces. Although numerous companies pursuing cost and differentiation concurrently may become trapped in the middle, there is patent evidence to suggest that at least some companies have been triumphant in achieving higher economic performance by pursuing both advantages (Karanja, 2010).

#### **4. Literature Review**

Enida, Vasilika and Amali (2015) conducted a study to investigate the impact of generic competitive strategies on organizational performance in Albanian. The study sought to investigate why some companies are different and obtain good performance compare to other companies. The study sought to investigate the applicability of Porter's generic strategies in construction firms. The study explained that the Porter's generic strategies including cost leadership and differentiation had a relationship with the firm's performance. The study concluded that the managers should design better competitive strategies they have to compete. Pimtong, Hanqin and Hailin (2012) investigated the influence of competitive strategies and organizational structure on logistics firm performance and to explore whether organizational structure has a moderating effect on the relationship between competitive strategies and logistic firm performance. The study analyzed the relationship between competitive strategies and organizational structure against logistics firm's performance. The results showed that competitive human resources had a direct impact on a logistics firm's performance. Organizational structure had an effect on performance.

Gloria and Ding (2015) investigated the effects of firm's competitive strategy on performance in China. The study found that market orientation exerted different effects on competitive strategy and performance. Structural equation analysis indicated that the mediating effect of competitive strategy was mainly revealed in innovation strategy, the most vital factor in creating superior value for the company in the emerging market. Duran and Akci (2015) conducted a study to investigate the impact of competitive strategies and supply chain strategies on the firm performance under environmental uncertainties Borsa Istanbul case in the manufacturing sector. Simple random sampling technique was adopted to select a sample of 174 companies listed in Borsa Istanbul. Questionnaires were adopted as a data collection instrument via e-mail and telephone. It was found that the competitive strategies influenced the supply chain strategies positively and significantly; cost leadership strategy and lean supply chain strategy had

a significant impact on the firm performance under the conditions of high uncertainty; whereas, differentiation strategy and agile supply chain strategy had a significant impact on the firm performance under the low uncertainty. The study concluded that the companies are supposed to use environmental uncertainty as a determinant of the perceptions in setting their strategies.

Gituku and Kagiri (2015) conducted a study to investigate the effects of competitive strategies on organizational performance of middle level colleges in Thika town. The study had the following objectives; to determine the effects of pricing strategies on organizational performance of middle level colleges; to establish how market focus affect performance of middle level colleges; to determine the effect of collaborations between middle level colleges and other institutions on their performance and to determine the effects of technology on organizational performance of middle level colleges. This study employed descriptive research design. Stratified simple random sampling technique was used to select the study respondents. The sample size for the research comprised of 92 top level managers and 200 middle level managers within 36 colleges spread out evenly within Thika. The researcher was able to obtain 258 fully filled questionnaires from the participants; Data was collected through use of scheduled interviews and questionnaires, which were distributed, to the top and middle level managers of different middle level colleges respectively. Data collected from the field was cleaned, organized, coded using Statistical Package for Social Sciences (SPSS) to facilitate answering the research objectives. Quantitative data was analyzed statistically through use of descriptive statistics such as frequency distributions and percentages while qualitative data was analyzed using content analysis. Multiple regression analysis was done to establish the relationship between the competitive strategies and performance of middle-level colleges in Thika Sub County. The study revealed that market focus strategies contribute 56.3% to college performance, pricing strategies contributes 46.6% to performance, collaborations contribute 26.7% and adoption of technology contributes 32.8% to performance of colleges. The study also established that there is a positive association between market focus, pricing strategies, collaborations, adoption of technology, which affect performance of middle-level colleges in Thika Sub County. The study recommended that middle level colleges should invest in advanced technologies and ensure that their employees' skills are continually updated through training, they do promotion through the internet, they ensure that their students can access online portal for registration, they dispatch student results online and they offer virtual learning as a competitive advantage. In conclusion, the study also recommended that middle level colleges should embrace collaborations with other supplementary institutions and forming linkages so that they can extend the learning base for their students and ensure that they are able to benchmark their services so that they can improve the quality of their services. The reviewed study was conducted in Thika Sub County while the current study will be conducted in Nairobi. The reviewed study was conducted among the colleges while the current study will be conducted among the logistics firms in JKIA.

The reviewed study focused on effects of competitive strategies on organizational performance of middle level colleges while the current study will focus on effects of competitive strategies on organizational performance of Logistics firms.

## 6. Materials and Methods

The study used explanatory research design. Explanatory research design is a method used to describe the cause-effect relationship (Cooper & Schindler, 2011). The target population involved 151 top and middle level managers of 10 logistics firms at JKIA, Nairobi. A sample size of 110 was selected for the study. The respondents were selected using simple random sampling technique. Questionnaire was used as instrument of data collection. Data analysis was conducted using descriptive and inferential statistics.

## 7. Findings and Discussions

The study sought to establish the different cost leadership strategies that the firms under study used. The study results are presented in Table 1 below.

**Table 1: Cost Leadership Strategy in logistics firms at JKIA**

Statement	SA	A	U	D	SD	T	M	S.D
<b>Operation cost</b>								
Transportation charges is lower than those of rivals	35	38	14	2	4	93	4.0538	1.00397
	37.6	40.9	15.1	2.2	4.3	100		
Cost of storage is lower than that of neighbouring firms	20	42	13	11	7	93	3.6129	1.17058
	21.5	45.2	14	11.8	7.5	100		
Firm incurs low administrative cost	22	46	10	10	5	93	3.7527	1.09996
	23.7	49.5	10.8	10.8	5.4	100		
<b>Input cost</b>								
The firm incurs less cost on labour	24	39	20	9	1	93	3.8172	.96624
	25.8	41.9	21.5	9.7	1.1	100		
The firms' equipment is less costly	20	58	5	4	6	93	3.8817	1.00919
	21.5	62.4	5.4	4.3	6.5	100		
Cost of facility is low	35	38	14	2	4	93		
	37.6	40.9	15.1	2.2	4.3	100	4.0538	1.00397
<b>Linkages</b>								
Cost of custom services	20	42	13	11	7	93	3.6129	1.17058
	21.5	45.2	14	11.8	7.5	100		
Cost of outsourcing transportation is low	22	46	10	10	5	93	3.7527	1.09996
	23.7	49.5	10.8	10.8	5.4	100		
Less is spent on outsourcing warehouse	24	39	20	9	1	93	3.8172	.96624
	25.8	41.9	21.5	9.7	1.1	100		
<b>Cost of service</b>								
Cost of storage is lower than that of competitors	26	41	14	6	6	93	3.8065	1.11568
	28	44.1	15.1	6.5	6.5	100		
Cost of shipping is lower than that of competitors	35	38	14	2	4	93	4.0538	1.00397
	37.6	40.9	15.1	2.2	4.3	100		

The study findings showed that 38 (40.9%) of the respondents were of the opinion that their firms' shipping charges were lower than that of rivals. This was indicated by a mean of 4.0538. Other findings showed that 42 (45.2%) of the respondents agreed that their firm seeks to cut cost through outsourcing of storage as indicated by a mean of 3.8065. Moreover, research indicated that logistics firms at JKIA also reduce their overall cost through outsourcing transport facilities from neighbouring firms as accounted by 46 (49.5%). The implication of these findings was that logistics firms charge lower prices. The firms have also been able to reduce costs associated to labour through automation and vigorously cost reduction strategies such as reduction in administration cost and outsourced functions have been employed by the firms in order to remain relevant in the market.

The findings also implied that majority of logistics firms offered customers affordable pricing on shipping of goods based on the size of the shipment equipment such as transit. Logistic firms encouraged customers to transport more and save less. This meant that logistics firms worked with other firms to reduce the wastage of space and still make profit. If transit equipment are not filled, logistics firms attract losses. However, if the equipment are fully filled, the logistics firms can comfortably compete with other logistics firms and even reduce the price a little bit more to beat their competitors. Thus, cost of equipment does not necessarily mean achieving time. Jephson (2014) also supported the study and stated that cost advantages can also be created through preferential access to crucial raw materials. If a business has rights to a resource (like data or natural resources) which competitors pay more for, they are set up for cost leadership. In logistics, an example of a shipping company is provided. In container liner service, once the network is set the liner is obliged to provide regular and reliable services meaning the ship need to leave the port regardless it is full or empty. It incurs fixed cost anyways, irrespective of sailing with or without cargo, which creates a pressure to the shipping companies to fill up their capacities by targeting volume, even if they have to shed their prices. Another big operational cost for the container shipping lines is to manage their equipment fleet. Due to trade imbalances, the number of exports and imports are not balanced which put the liner into a situation to position empty containers from surplus areas (import region) to deficit areas (export region). Moving empty containers is costly; as it not only occupies a slot in a ship, which is an opportunity cost but also incurs terminal handling cost. This situation also influences the liner shipping companies to secure any low paying cargo, and transport them just on Marginal Cost. These are opportunities for the shippers to transport their cargo at very low cost, however comes at a cost of the shipping liners who have set themselves in a position by accepting cargos at a freight, below their total cost structure.

Zhang (2014) believes that the competitiveness of a firm depends on its ability to use its resources and organize its resources in a way that is not easy to imitate. The resources for a container shipping line are its physical assets like vessels, equipment's and network; capital and human resources. The strategies like cost leadership and differentiation to gain sustainable competitive advantages should be based on the firm's

resources and capabilities. Therefore, firm's resources and capabilities are the determinants of the success of the firm's strategy on cost leadership, differentiation or combined. Paris (2015) stated that shipping has been commoditized to trigger price wars among the container lines. In order to offset the negative impact of the declining revenue and profit margin, and with not much control on the price side due to commoditization, the shipping lines are left with no choice other than to focus in reducing their internal costs. Cost leadership strategy is the dominant strategy for this industry and the company, which can achieve lowest cost position, will emerge as a winner in this deflated market. Otherwise, once the competitors reach the same cost level and engage into price wars, all the cost advantages will be lost, handing over all the benefits that were achieved through cost leadership strategy to the customers. The study concludes that the goal of logistics firms is to pursue cost leadership strategy is to become the low cost producer in the industry. A low cost position will give these firms defences against rivalry from competitors because their lower costs mean that they can still earn returns after its competitors have competed away their profits through rivalry. Cost leaders should improve efficiency and control costs throughout the firms' value chain. This study sought to determine if these implications are held true for firms' pursuing cost leadership strategy and organisation performance. Therefore, a correlation analysis was computed at 95% significance level. The results are presented in Table 2.

**Table 2: Correlations of Cost Leadership and Logistics Firms Performance**

		<b>Organizational Performance</b>
Cost leadership	Pearson Correlation	0.817**
	Sig. (2-tailed)	0.000
	N	93

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result shows that there exist significant positive relationship between application of cost leadership strategies and performance of logistics firms at JKIA. This implies that increase on use of cost leadership approaches result to increase in organisation performance. Based on the results of this study, cost leadership strategy affects organizational performance of logistics firms in JKIA.

## 8. Conclusions and Recommendations

Based on the findings of the study, it was established that logistics firms pursuing cost leadership strategy aimed at becoming the lowest cost producers in the industry. Cost leaders seek to improve efficiency and control costs throughout the organizations' supply chain. This study sought to determine if these implications are held true for logistics firms' pursuing cost leadership strategy. Based on the results of this study, cost leadership strategy has a significant effect on organizational performance of logistics firms in JKIA. Cost leadership strategy leads to increase in sales volume and profit this



enhancing organizational performance. Through cost leadership strategy, logistics firms are able to reduce their logistics services cost without sacrificing essential features and acceptable quality. Through adoption of cost leadership strategy, logistics firms, are able to be more competitive, fight of competition and improve overall organizational performance. From the findings on cost leadership strategy, the study recommends that Cost leadership strategies be incorporated well with differentiation strategies for the success of the three competitive strategies and thus, making a logical application on performance of logistics firms. Currently, cost saving mechanism is a major consideration in industries in Kenya due to high tax rates because of higher cost of fuel therefore the study recommends that the management of logistics firms deepen their engagement into more cost-Influencing methods of running a firm. It is further recommended that the logistics pay attention to value chain management practices that result in reduction of cost.

## References

- Cooper, M. & Schindler, P. (2011). *Understanding the Research Process and methods: An Introduction to Research Methods*. Nairobi: Acts Press.
- Duran, C. & Akci, Y. (2015). Impact of competitive strategies and supply chain strategies on the firm performance under environmental uncertainties Borsa Istanbul case in the manufacturing sector. *International Journal of Economics, Commerce and Management*, 3(1), 1-33.
- Enida, D., Vasilika, L. & Amali, A. (2015). Examining the Impact of Competitive Strategies on Corporate Innovation: An Empirical Study in Automobile Industry. *International Journal of Asian Social Science*, 6(2): 135-145.
- Gituku, G. W. & Kagiri, A. (2015). Effects of competitive strategies on organizational performance of middle level colleges in Thika sub county. *International Academic Journal of Human Resource and Business Administration*, 1 (5), 83-106.
- Gloria L. G. & Ding, D. Z. (2015). Competitive Strategy and Firm Performance: An Empirical Study of Chinese Firms. *Journal of Global Marketing*, 18(3) 4 - 10.
- Ittmenn, C. Y., & King, N. (2010). Explaining the competitive advantage of logistics providers: A resource-based view approach. *International Journal of Production Economics* 128, 51-67.
- Jephson, H. C. M. (2014). *Creating Global Opportunities: Maersk Line in Containerisation 1973-2013*. Cambridge: Cambridge University Press.
- Karanja, G. (2015). *A survey of competitive strategies of real estate firms in the perspective of Porter's generic model*. Unpublished MBA Project, University of Nairobi.
- Kitoto, L.A. (2016). *Competitive Strategies Adopted By Universities in Kenya* (Unpublished MBA Thesis). University of Nairobi, Nairobi, Kenya.
- Paris, C. (2015). *Asia-Europe Freight Rates Fall below Fuel Costs*. Retrieved from The Wall Street Journal.

- Pimtong, S.X., Xie, X.M., Tam, C.M. & Wan, T.W. (2012). Competitive priorities of manufacturing firms for internalization: an empirical research: *Measuring Business Excellence* 12(3), 44-55.
- Pimtong, T., Hanqin Q. Z. & Hailin Q. (2012). The effects of competitive strategies and organizational structure on logistics firms 'performance, *International Journal of Contemporary Hospitality Management*, Vol. 24 (1), 140-159
- Porter, M., (2002). *Competitive Strategy*. The Free Press.
- Porter, M.E. & Millar, V.E. (1985). How information gives you competitive advantage: *Harvard Business Review* 63 (4), 149-60.
- Roman, A.N., Goh, M. & Meng, F. (2013). Conceptual modelling for supply chain inventory visibility. *International Journal of Production Economics* 133(2), 578-58.
- Spillin, G., Spillin, K. & Liu, H. (2013). Supply chain management, partnerships, and the shipper-third party relationship. *International Journal of Logistics Management*, 1(2), 1-10.
- Sumer, K., & Bayraktar, C. A. (2012). Business strategies and gaps in Porter's typology: a literature review. *Journal of Management Research*, 4(3), 100-119.
- White, M.E., (2008). Strategy and the Internet, *Harvard Business Review*, 79 (3), 62-78.
- World Bank's Logistics Performance Index (LPI) Measuring Logistics Performance World Bank, (2017). Kenya economic update: Accelerating growth and poverty reduction in the Kenya.
- Zhang, A. J. S. (2014). Impacts of schedule reliability and sailing frequency on the liner shipping and port industry: a study of Daily Maersk. *Transportation Journal*, 235-253.

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